

Claims

1. A method of joining magnetic and nonmagnetic materials together in a process wherein an annular space formed between an inner member and an outer member each made of magnetic material is fitted with a ring of nonmagnetic material, characterized in that the method comprises the steps of:

bringing an inner and an outer peripheral surface of the ring of nonmagnetic material each into a semi-molten state; and

bringing the inner and outer peripheral surfaces of said ring of nonmagnetic material into pressure contact with said inner and outer members, respectively, to join said inner and outer peripheral surfaces to said inner and outer members, respectively, by interfacial fusion.

2. A method of joining magnetic and nonmagnetic materials together as set forth in claim 1, characterized in that the ring of nonmagnetic material is heated to a temperature sufficient to make it semi-molten and the semi-moltened ring of nonmagnetic material is then fitted into said annular space under pressure.

3. A method of joining magnetic and nonmagnetic materials together as set forth in claim 1, characterized in that the ring of nonmagnetic material is fitted under pressure into said annular space and thereafter is heated by high-frequency induction heating to a temperature sufficient to make it semi-molten and is then compressed under pressure.

4. A method of joining magnetic and nonmagnetic materials together as set forth in claim 1, characterized in that the ring of nonmagnetic material is fitted under pressure into said annular space and thereafter a rotating body is pressed against an end face of said ring of nonmagnetic material whereby a frictional heat then generated heats said ring of nonmagnetic material to a temperature sufficient to make it semi-molten.